

## STATE OF MICHIGAN

## DEPARTMENT OF ENVIRONMENTAL QUALITY SAGINAW BAY DISTRICT OFFICE



DIRECTOR

May 25, 2016

Ms. JoLisa McDay City of Flint Water Treatment Plant 4500 N. Dort Highway Flint, Michigan 48505

Dear Ms. McDay:

Subject: Water Treatment Plant Preparations for Start-Up, WSSN: 02310

This letter will confirm our conversation on May 18, 2016, regarding the city of Flint Water Treatment Plant. During this conversation, we discussed modifications to the city of Flint's (City) monthly operation report and preparations needed at the plant for a test run.

Starting as soon as practical, the City should monitor the treated water received from the Great Lakes Water Authority daily for sulfate, dissolved oxygen, and carbonate and bicarbonate alkalinity. The information, along with water quality analyses already being conducted, should be used to calculate the Langelier Saturation Index, Chloride: Sulfate Mass Ratio, and Larson-Skold Index. The analyses and calculations should be recorded on a daily basis and reported to us monthly. Eventually, the same constituents and indexes will be analyzed, calculated and reported by the City for the raw and treated water during any test and production runs of the treatment plant. Also, the information will aid in establishing water quality parameters for corrosion control. A summary of the water quality indexes, and the parameters used to calculate them, is enclosed for your information. We would appreciate your written response as to when you expect to start the monitoring and reporting changes.

This additional monitoring is being requested pursuant to R325.10732 and R325.11505 of the administrative rules for the Michigan Safe Drinking Water Act, 1976 PA 399, as amended. Similar requests are being made of other community water supplies experiencing significant changes in the lead 90th percentile levels being reported from their Lead and Copper Rule monitoring. The goal of the new monitoring and calculations is to give these community water systems additional tools in early detection and correction of potential problems.

Since start-up of the treatment plant for an extended test run is imminent, the City is encouraged to complete its staffing and begin maintenance of each unit process. This includes ensuring the integrity of all hoses, drives and seals, clearing of all feeders of old chemicals, and ensuring the functionality of all control and logging systems. Although the water treatability study being performed by Lockwood, Andrews and Newnam, Inc. has not been completed, it may be prudent to check the compatibility of

the present ferric chloride feed system with other potential coagulants such as alum or ferric sulfate in the event the report recommends a change in primary coagulant. Similarly, other feed systems should be examined to check their compatibility with compounds used for raising the pH or increasing the alkalinity of the treated water, such as soda ash or sodium hydroxide.

If there are any comments or questions, please feel free to contact me at the number below or by email at bloemkerj@michigan.gov.

Sincerely,

Jon W. Bloemker, District Supervisor Cadillac-Saginaw Bay District Supervisor Office of Drinking Water and Municipal Assistance 989-460-7254

JB:ajl Enclosure

cc: Mr. Jim Sygo, DEQ

Mr. Richard Benzie, DEQ Mr. Robert London, DEQ Mr. Brian Thurston, DEQ Ms. Laura Verona, DEQ Mr. Tom Speth, EPA